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PATENT

Attorney Reference Number 3382-68270-01  
Application Number 09/955,731

### Remarks

The Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the following remarks.

Claims 67-132 are pending. Claims 1-66 have been canceled without prejudice.

In the final Office action dated January 11, 2006, the Examiner rejected claims 1-4, 6-15, 17-26, 28-42, 45-50, 53-60 and 63-66 as being unpatentable over U.S. Patent No. 5,933,451 to Ozkan et al. ("Ozkan"). The Examiner rejected claims 5, 16, 27, 43, 44, 51, 52, 61 and 62 as being unpatentable over Ozkan in view of U.S. Patent No. 6,873,629 to Morris ("Morris"). The Applicants respectfully disagree with the rejections of the claims.

#### I. Ozkan.

In the interest of reaching a shared understanding of the disclosure of Ozkan, the Applicants make the following observations.

Ozkan describes varying the number of bits allocated to different channels of video over a quota period. (Ozkan, 3:22-46, 8:63-9:8.)  $R^i$  indicates the number of bits allocated to a video channel  $i$  over a quota period. (*Id.*) When a video channel has more complex content, relatively more bits are allocated to that video channel with fewer bits allocated to other video channels. (*Id.*) When a video channel has less complex content, relatively fewer bits are allocated to that video channel, with more bits allocated to other video channels. (*Id.*) In this way, bits according to an overall budget  $R$  are allocated to different video channels over the quota period depending on video complexity.

Ozkan also describes refining allocated bit rates to provide buffer management, for example, to ensure that input buffers of receiver decoders do not overflow or underflow. (Ozkan, 10:54-58.) Ozkan indicates a decoder buffer size  $D$  is "fixed." (Ozkan, 10:62.) According to Ozkan, if an encoder buffer size is capped, the bit rate allocation  $R^i$  for a video channel can vary between a minimum bit rate allocation  $R_{min}$  for the video channel and a maximum bit rate allocation  $R_{max}$  for the video channel without inducing underflow or overflow. (Ozkan, 10:62-67.) Ozkan then describes how this constraint on encoder buffer size can be relaxed. (Ozkan, 11:5-12:30.)

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## **II. Claims 67-132 Should Be Allowable.**

Ozkan fails to teach or suggest at least one limitation in each of claims 67, 92, 108, 117, 121, 128 and 132 for at least the following reasons.

First, Ozkan describes computing a number of bits  $R^i$  allocated to a video channel  $i$  over a quota period, for the purpose of allocating bits between different channels depending on the complexity of different video in the different video channels. (Ozkan, 3:22-46, 8:63-9:8.) Dynamically setting a bit allocation  $R^i$  for rate control depending on video complexity (as in Ozkan) involves setting a current, actual rate target for video. It is different than "determining an operating condition ... wherein the operating condition indicates peak rate or decoder buffer size for decoding encoded data for the given video" (as in claims 67 and 121, respectively) and "determination of an operating condition, wherein the operating condition indicates peak rate or decoder buffer size for decoding encoded data for the given video" (as in claims 92, 108, 117, 128 and 132, respectively).

Second, Ozkan describes a minimum bit rate allocation  $R_{min}$  for a video channel, a maximum bit rate allocation  $R_{max}$  for the video channel and a decoder buffer size  $D$  for the video channel. Even if, for the sake of argument,  $R_{min}$ ,  $R_{max}$  and  $D$  were considered to be reference decoder parameters,  $R_{min}$ ,  $R_{max}$  and  $D$  would be in a single set of reference decoder parameters for video in one channel. Using a single set of reference decoder parameters for given video is different than, and leads away from, "multiple sets of reference decoder parameters" for given video, "wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter" (as in claims 67, 92, 108, 117, 121, 128 and 132, respectively). Using a single set of reference decoder parameters for given video is also different than, and leads away from, "wherein the multiple sets are concurrently available for use in the determining the operating condition" (as in claims 67 and 121, respectively) and "wherein the multiple sets are concurrently available for use in determination of an operating condition" (as in claims 92, 108, 117, 128 and 132, respectively).

Morris also fails to teach or suggest the above-cited language of claims 67, 92, 108, 117, 121, 128 and 132, respectively.

Claims 67, 92, 108, 117, 121, 128 and 132 should be allowable. In view of the foregoing comments, the Applicants will not belabor the merits of the separate patentability of dependent

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claims 68-91, 93-107, 109-116, 118-120, 122-127, and 129-131. Dependent claims 68-91, 93-107, 109-116, 118-120, 122-127, and 129-131 should also be allowable.

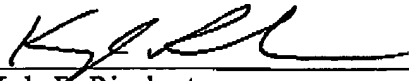
**III. Conclusion.**

Claims 67-132 should be allowable. Such action is respectfully requested. The Examiner is invited to call the undersigned attorney at the telephone number below if the Examiner believes that doing so would further the prosecution of the present application.

Respectfully submitted,

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